

Ministry of health of Ukraine
National Pirogov Memorial Medical University

“AGREED”

at Methodical Meeting
of pediatric disciplines
protocol № 6
from 07/03/2024

Head of Methodical Meeting,
professor of HEI


Veronika DUDNYK

“APPROVED”

by Academic Council
National Pirogov Memorial
Medical University
protocol № 9
from 25/04/24

Head of Academic Council,
professor of HEI


Viktoriia PETRUSHENKO

Instructions for station number 5

Standardized patient in pediatrics. Clinical case

Tasks:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Equipment of the station:

1. Clinical situation scenario.
2. Pediatric phantom.
3. Results of additional laboratory and instrumental investigations.
4. Paper A4.
5. Pen.

In the case of distance form (in the conditions of the wartime situation and in order to prevent the spread of acute respiratory disease COVID-19 caused by coronavirus SARS-CoV-2), the procedure of Objective structured practical (clinical) exam (OSP(C)E) is regulated by the Regulations on the introduction of elements of distance learning in VNPMU and will be held on the Microsoft Teams platform.

Equipment for remote form of OSP(C)E: situational tasks, data sets, virtual patients.

On the day of the exam, the secretary of the State Examination Commission join a student to the examiner's meeting accordingly to the schedule of a group that passes the exam. At the station the student must greet and introduce himself, provide a document (passport) proving his identity to the teacher. The student receives a clinical task, which include assessment of the patient's complaints, patient's history and physical examination data, interpret the results of laboratory and instrumental methods of examination of the patient, make a diagnosis, determine the tactics of the patient and prescribe treatment with naming a group of drugs and examples, students have to give a short answer to additional questions if it present in task.

The duration of passing of each station is 5-7 minutes. When the time is up the examiner will not accept the answer. Note that the teacher is an observer of your actions and does not provide instructions, comment or question.

Requirements for passing the station:

- Use a computer or laptop during the exam.
- The answer will be accepted only when camera and microphone are turned on and the student who passes the exam is clearly visible with a clear sound.
- Video is recorded at every station.

It is forbidden to use a mobile phone and other electronic gadgets, copy and take out any information related to the exam.

Part of OSP(C)E -2 for pediatrics and children's infectious diseases consists of two stations.

Station № 5 " **Standardized patient in pediatrics. Clinical case**"

Situational tasks from the modules of pediatric cardiology, rheumatology, pulmonology, gastroenterology, nephrology, hematology, neonatology, pediatric infectious diseases and endocrinology are presented.

An example of evaluating the response of a higher education applicant (HEA) to a practical (situational) task.

A 14-year-old boy came to the clinic with complaints of periodic stomach pain, heartburn, and cough.

The child was examined by a surgeon, surgical pathology was excluded.

Vital signs:

T – 36,7 C

RR – 18 per min.

HR – 84 per min.

SpO₂ – 98 %

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient

5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Examples of answers and scoring:

№	Student's answer	Score/traditional mark
1. Communication (soft) skills of the student	<ul style="list-style-type: none"> • Greeted the patient/shake hands/introduce yourself. • Made eye contact; maintained a proper posture. • Put the drape on the patient and covered the legs. • Started with an open -ended question. • Avoided technical terms. • Shown empathy and address the patient's concerns and expressions. 	0,1 – «5»
		0 – «0»
2. Detailed focused history (according complains and symptoms)	<ul style="list-style-type: none"> • The onset of the disease • Changes in appetite • Dyspnea/shortness of breath • Type of pain • Type of cough • Increase in body temperature • Vomiting • Diet • Diarrhea/constipation • Changes in weight • Previous treatment at home • Hereditary anamnesis • Bad habits • Allergic anamnesis 	0,7 - «5»
		0,65-0,6 – «4»
		0,45-0,5 – «3»
		0
3. Physical exam	<ul style="list-style-type: none"> • Hand sanitization was performed. • Told the patient what he/she was going to do. • Asked permission to start the physical exam. • Didn't repeat painful maneuvers. • Vital signs: measured T, SpO2, HR, RR • Estimated mucous membranes • Investigated abdomen (examination and palpation) 	0,7 -«5»
		0,65-0,6-0,55 – «4»
		0,4-0,5 – «3»
		0
4. Dialogue with the patient about possible diagnosis/condition and differential diagnosis	<ul style="list-style-type: none"> • Explained thoughts on a possible diagnosis • Received feedback from the patient • Answered patient's questions • Information/clarification regarding the differential diagnosis 	0,6 - «5»
		0,65-0,6-0,55 – «4»
		0,45-0,5 – «3»
		0
5.Diagnostic workup	<ul style="list-style-type: none"> • Complete blood count • Urinalysis • Stool test, occult blood (Gregersen reaction) • FEGDS 	0,7 - «5»
		0,65-0,6-0,55 – «4»

	<ul style="list-style-type: none"> • Biopsy of the stomach and duodenum • H. pylori test • Ultrasound of the abdomen • Intra-gastric pH-metry 	0,4-0,5 – «3»
		0
6. Comment of the tests results	<ul style="list-style-type: none"> • CBC: no changes • Urine tests: pathology not found. • Stool test, occult blood – blood not found. • FEGDS – the mucous membrane of the esophagus is hyperemic with two erosions up to 5 mm covered with fibrin. The lower esophageal sphincter closes. Stomach and duodenum without pathology. • H. pylori test: negative • Ultrasound investigation of abdomen - pathology not found. • Daily pH-measurement of the esophagus - acid exposure (reflux) exceeds up to 95%. 	0,7 - «5»
		0,65-0,6-0,55 – «4»
		0,4-0,5 – «3»
		0
7. Final diagnosis	Gastroesophageal reflux disease with erosive esophagitis	0,7 - «5»
		0,6-0,55 – «4»
		0,4-0,5 – «3»
		0
8. Management (consult and treat)	<ul style="list-style-type: none"> • Gentle nutrition (mechanical, thermal, chemical). • Ethiotropic therapy – Antacids (Magnesium alginate 5 ml 3 times a day). Proton pump inhibitors (Omeprazole 1-4 mg/kg/day). Prokinetics (Domperidone 0.8-0.9 mg/kg/day). 	0,7 - «5»
		0,65-0,6-0,55 – «4»
		0,4-0,5 – «3»
		0
Total		5 - «5»
		4,6-4,0 – «4»
		3,95-3,0 – «3»
		0

List of situations: various pathology of a childhood (pneumonia, bronchial asthma, cystic fibrosis, congenital heart diseases (coarctation of aorta, tetralogy of Fallot), juvenile rheumatoid (idiopathic) arthritis, reactive arthritis, IgA-associated vasculitis, urinary tract infection, acute pyelonephritis glomerulonephritis, thrombocytopenic purpura, leukemia, lymphoma, anemia, diabetes, obesity, acute respiratory viral infection, functional gastrointestinal disorders in young children, functional constipation, gastroesophageal reflux disease with erosive esophagitis, duodenal ulcer, nonrheumatic carditis, hemolytic disease of newborns, hemorrhagic disease of the newborn, acute intestinal infection, scarlet fever, measles, chickenpox, acute viral hepatitis A, acute respiratory disease of COVID-19, congenital herpesvirus infection, intrauterine infection.

Scenario 1

A 14-year-old boy came to the clinic with complaints of periodic stomach pain, heartburn, and cough.

The child was examined by a surgeon, surgical pathology was excluded.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 2

5 yo child with complaints on pronounced paleness of the skin and the appearance of multiple bruises.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 3

A 6-year-old child with sensitization to house dust was admitted to the outpatient department.

Complains on episodes of shortness of breath, dry cough.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 4

A 16-year-old girl came to the clinic with complaints on lack of appetite, nausea, and periodic abdominal pain.

The child was examined by a surgeon, surgical pathology was excluded.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 5

11 yo boy with complains on enlargement of right knee, hematomas on his shin.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 6

6 y.o. girl, after respiratory infection complains of multiple bruises on her skin and nasal bleeding day before.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 7

6 yo child with complains on increasing of blood pressure.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 8

16-year-old child with complains on a tumor-like formation in the right neck area.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 9

On the visit, a 7-year-old child complains of a constant cough with viscous sputum, fatty stool and delay in physical development.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 10

10 yo child (boy) with complains on increased appetite, excessive body weigh

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination

4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 11

A 12-year-old teenager, accompanied by an older adult sister, was brought to the reception department by the ambulance team with complaints of an increase in body temperature to 39.5⁰C, sore throat, runny nose, cough, loss of smell and taste.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 12

In the admission office of a medical and preventive institution there are a mother and a 12-years-old boy with complaints on general malaise, abdominal pain, icteric colour of the skin and sclera.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 13

The mother of a newborn girl complains about the appearance of jaundice in her child. The age of the child is one day.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and

differential diagnosis with the patient

5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 14

During the morning visit, the mother of a newborn girl complains of vomiting with dark blood in her child after feeding and the appearance of a rash. The age of the child is 3 day.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 15

The mother of a newborn boy visited a doctor with complaints of a rash on the scalp, trunk, inguinal areas and neck folds. The child is 10 days old.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 16

5 yo child with complains on fever and cough.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 17

There is a mother with a 2-month-old child with cyanosis of the skin

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 18

6 yo girl with complains on thirst, frequent urination and weight loss.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 19

At the doctor's appointment a 10-year-old girl with complaints of an increase in body temperature to 38.0°C, pain in the knee joints

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 20

A 5-year-old boy developed a skin rash, swelling and pain in both knee joints after an acute viral infection.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 21

A 10-year-old child with complaints of headache, weakness, swelling on the face and lower extremities and discoloration of urine

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 22

The mother with a 4-year-old girl, immunized in accordance with the schedule of preventive vaccinations, came to the admission office of a medical institution with complaints that her daughter has an increased body temperature up to 38.9⁰C and an itchy rash on the body.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 23

In the admission department of a medical institution, a mother with a 5-year-old unimmunized boy with complaints of an increasing of body temperature up to 39.0⁰C, redness of the eyes, coryza, cough and a rash on the body.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 24

The baby is 12 days old. During the examination by the doctor on duty, the mother complains of a rash on the baby's skin.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 25

The mother of a 14-day-old boy complained to the doctor that her child has respiratory disorders, swelling of the eyelids and eye discharge, cyanosis appears during feeding and crying.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 26

A mother and her 7-year-old child sought medical help in the reception department of a medical and preventive institution with complaints on a sudden increase in body temperature to 39.20 C, a sore throat, general weakness, and the appearance of a rash on the skin.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 27

5 y.o. child with complains on edema on the face, limbs.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 28

12 y.o. girl with complains on fever up to 39 °C, lethargy, low appetite, frequent and painful urination.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 29

At the reception, a mother with a 4-y.o. child has complains of rapid fatigue and pale skin.

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination

4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)

Scenario 30

At the reception, a 3-year-old child complains of episodes of delayed defecation

Exam steps:

1. Show communication (soft) skills of the student
2. Collect detailed focused history (according complains and symptoms)
3. Physical examination
4. Share your thoughts about possible diagnosis/condition and differential diagnosis with the patient
5. Create the list of diagnostic workups
6. Comment of the tests results
7. Name the final diagnosis
8. Manage this condition (consult and treat)